SOUTH CAROLINA INFLUENZA (FLU) PLAN

The risks for complications, hospitalizations, and deaths from influenza are higher among persons 65 and older, young children, and persons of any age with certain underlying health conditions. In addition, flu shots for all pregnant women, adults 50 or older and everyone living with children under the age of 2 can also help close the health gap between minorities and whites, according to the U.S. Public Health Service.

Influenza epidemics cause an average of 36,000 deaths and over 200,000 excess hospitalizations annually in the United States, and pandemic influenza poses a threat of much higher mortality. Influenza impacts all age groups - infection rates are highest in children, serious illness and mortality are highest in the elderly and chronically ill.

In the United States, the primary option for reducing the effect of influenza is taking the flu vaccine, either as the shot or the nasal spray. The prevention and control of influenza depends on effective laboratory-based surveillance and reporting, vaccination of the targeted population groups, and the use of antiviral medications as adjuncts to vaccine.

DHEC programs maintain a seasonal influenza vaccination campaign and several surveillance systems for influenza-like illnesses and for influenza viral isolations. Adequate surveillance for influenza is essential for the following reasons: 1) to monitor influenza morbidity, 2) to plan for the use of vaccine and antiviral agents, 3) to monitor the predominant circulating strains and to determine if they are well matched to the current year's influenza vaccine, and 4) to look for the emergence of novel viral strains.

Those who neglect or refuse to get flu shots include a disproportionate number of minorities, said Dr. Jose Cordero, as assistant surgeon general at the Centers for Disease Control and Prevention (CDC) in Atlanta. Most people who die from influenza are 65 or older. But in that age group, only 70 percent of whites and 68 percent of African Americans and Hispanic Americans got flu shots in South Carolina during 2004. The Healthy People 2010 goal is to achieve both influenza and pneumococcal immunization level of at least 90 percent for all South Carolinians.

Minorities, especially those who aren't fluent in English, are less likely to know or be informed by a physician that they need a flu shot every year. Raising flu vaccination rates among minorities will require shattering some myths. It is important to counter the biggest myth of all, that the vaccine causes flu. Modern vaccine causes almost no unpleasant side effects beyond a slight sore spot on the arm for an hour (if you elect to take the shot form of the vaccine). A nasal spray influenza vaccine is also available for healthy persons between the ages of 5 through 49 years.

Much experience shows that health care workers can spread the highly contagious influenza virus to patients in their care. This is particularly troubling for the many patients at high risk for influenza-related complications, hospitalizations, and death since only about 36 percent of health care workers are actually immunized against influenza each year. "It's just good common sense for all health care workers to get vaccinated to protect themselves and to keep from giving potentially fatal flu to their high-risk patients", says Dr. Jerry Gibson, Director of DHEC's Bureau of Disease Control.

"It's vital to not miss the chance to get high-risk persons vaccinated easily without any extra office visits, by being sure that every physician's office or clinic includes an offer of vaccine to protect against influenza, pneumonia, and tetanus", says Gibson. "Moreover, every nursing home resident and hospital inpatient should be offered protective vaccines while in the care of these institutions. There is no excuse for missing these opportunities", says Gibson.

News of FDA's licensing of GlaxoSmithKline's (GSK) influenza vaccine and the company's announcement to sell about 8 million doses in the U.S. this season, coupled with Sanofi pasteur's 50 to 60 million doses, and MedImmune's 3 million doses of FluMistTM produce a brighter outlook for the national Influenza vaccine supply for the 2005-06 season. If Chiron secures FDA approval, company officials indicate they plan to produce 18-26 million doses for use in the U.S.

Based on this information, CDC recommends that influenza vaccination proceed as soon as vaccine is available. Persons at increased risk for influenza complications are again the focus of this year's influenza vaccination strategy.

On September 2, 2005, CDC announced, "Given the uncertainties in doses and distribution, CDC recommends that the following priority groups receive inactivated influenza vaccine until October 24, 2005. Beginning October 24, 2005, all persons will be eligible for vaccination". This document can be seen by clicking on the following link: http://www.cdc.gov/mmwr/preview/mmwrhtml/mm5434a4.htm

- Persons aged 65 and older, with and without chronic health conditions
- Residents of long-term care facilities
- Persons aged 2-64 years with chronic health conditions
- Children aged 6-23 months
- Pregnant women
- Health-care personnel who provide direct patient care
- Household contacts and out-of-home caregivers of children aged <6 months

It should be noted that vaccination with the live, nasal-spray flu vaccine (FluMistTM) is always an option for healthy persons aged 5-49 years who are not pregnant. This vaccine is not subject to prioritization and can be given to healthy 5-49 year olds at any time.

The optimal time to vaccinate against influenza is October and November; those planning vaccination campaigns might consider scheduling those events after mid-October, to ensure vaccine availability.

Both the inactivated and live, attenuated vaccines prepared for the 2005-2006 season will include A/California/7/2004 (H3N2)-like, A/New Caledonia/20/99 (H1N1)-like, and B/Shanghai/361/2002-like antigens. For the A/California/7/2004 (H3N2)-like antigen, manufacturers may use the antigenically equivalent A/New York/55/2004 (H3N2) virus, and for the B/Shanghai/361/2002-like antigen, manufacturers may use the antigenically equivalent B/Jilin/20/2003 virus or B/Jiangsu/10/2003 virus.

Approved influenza vaccines for different age groups are shown below in Table 5.

TABLE 5. Approved influenza vaccines for different age groups						
6 mos-3 yrs	4 yrs	5–49 yrs	<u>≥</u> 50 yrs			
Χ*	X	Х	X			
	X	X	X			
		X				
	6 mos–3 yrs	6 mos–3 yrs 4 yrs	6 mos–3 yrs 4 yrs 5–49 yrs			

* Children aged 6-35 mos should receive 0.25 mL/dose. Persons aged >35 mos should receive 0.50 mL/dose.

Note. The newly approved GlaxoSmithKline's (GSK) influenza vaccine (FluarixTM) is licensed for persons aged 18 and older.

Dosage by age group is shown in Table 4 below.

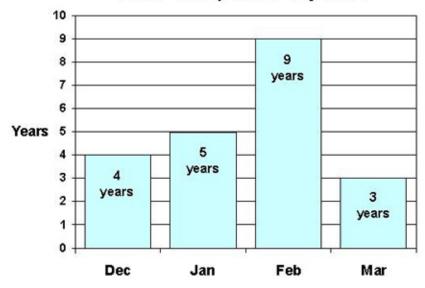
TABLE 4. Inactivated influenza vaccine* dosage, by age group — United States, 2005–06 season

Age group†	Dose	No. of doses	Route [§]
6-35 mos	0.25 mL	1 or 2 [¶]	Intramuscular
3–8 yrs	0.50 mL	1 or 2¶	Intramuscular
≥9 yrs	0.50 mL	1	Intramuscular

- * A 0.5-mL dose contains 15 mg each of A/California/7/2004 (H3N2)-like, A/New Caledonia/20/99 (H1N1)-like, and B/Shanghai/361/2002-like antigens. For the A/California/7/2004 (H3N2)-like antigen, manufacturers may use the antigenically equivalent A/New York/55/2004 virus, and for the B/Shanghai/361/2002-like antigen, manufacturers may use the antigenically equivalent B/Jilin/20/2003 virus or B/Jiangsu/10/2003 virus. Manufacturers include Sanofi Pasteur, Inc. (formerly Aventis Pasteur, Inc.) (FluZone[®] split virus); and Chiron (FluvirinTM purified-surface-antigen vaccine). FluZone is approved by the Food and Drug Administration for use among persons aged ≥6 months. Fluvirin is approved for use in persons aged ≥4 years. For further product information, call Sanofi Pasteur at 800-822-2463 or Chiron at 800-244-7668.
- [†] Because of their decreased potential for causing febrile reactions, only split-virus vaccines should be used for children aged <13 years. Whole-virus vaccine is not available in the United States. Split-virus vaccine might be labeled as *split*, *subvirion*, or *purified-surface-antigen* vaccine. Immunogenicity and side effects of split- and whole-virus vaccines are similar among adults when vaccines are administered at the recommended dosage.
- §For adults and older children, the recommended site of vaccination is the deltoid muscle. The preferred site for infants and young children is the anterolateral aspect of the thigh.
- Two doses administered at least 1 month apart are recommended for children aged <9 years who are receiving influenza vaccine for the first time.

Peak Months for Flu Activity

Over the past 21 years



Contact your local county health department or family doctor to find out when they will begin giving flu shots this October. For additional information on influenza vaccine and/or disease surveillance contact:

Vaccine assistance – contact DHEC Immunization Division 1-800-277-4687 (1-800-27-SHOTS) http://www.scdhec.gov/health/disease/immunization/links.htm

Influenza Disease Surveillance – contact DHEC Division of Acute Disease Epidemiology 803-898-0861 http://www.scdhec.gov/health/disease/acute/flu.htm

For additional information on influenza visit the CDC web site at www.cdc.gov/nip/Flu.

Medical Review of North Carolina, Inc. (MRNC) is designated by the Centers for Medicare & Medicaid Services (CMS) as the Quality Improvement Organization (QIO) for North and South Carolina. MRNC operates in South Carolina under the service mark Carolina Medical Review (CMR). A Flu Clinic Finder is available on this web site that will identify providers who are scheduling flu shots — www.mrnc.org

South Carolina Lung Association http://www.lungsc.org/

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